Peer Exchange Questions on Asset Management

Pennsylvania DOT

- 1. How is your organization using asset management in decision making and resource allocation?
 - a. Who are the primary users of asset management and how are they using it (staff level only, director, governors, etc.)

PENNDOT: Our Department has been using State-wide performance measures for decision making and resource allocation for a number of years. However, our management systems are legacy systems that have only limited predictive modeling capabilities that limit our ability to fully utilize asset management principles in making trade-off decisions. Our bridge management system is being re-written to improve these capabilities and our Roadway Management System and maintenance management system will follow shortly there after.

In the interim, some relatively simplistic predictive analyses based upon the statewide condition of our assets are leading to some Department-wide trade-off decisions for our construction program. An increased proportion of our spending for improvements and preservation is being directed to our bridges.

The Department-wide goals, based on standard Performance Measures, set for our tactical 4 Year Business Plan cycles are adapted by our Districts for the management of the highway and bridge assets in their area.

- 2. Benefits to using Asset management
 - a. How has your system improved or your program changed due to the use of asset management principle and data?

PENNDOT: Tactical planning, for our Department assets, now based more on performance measures and the more-simple asset analyses, is helping to direct our resources in a more effective manner. Even just the use of performance measures draws more attention and internal focus on making improvements.

- 3. Barriers to using Asset Management
 - a. Data problems/integration/collection

PENNDOT: Our limitations include:

- Older legacy management systems have a wealth of condition information, but have limited predictive functionality.
- Older legacy systems are "silo" oriented and do not allow good trade-off decisions.
- Our new financial management system is not yet fully integrated with the asset management systems.
- Some important factors for trade-off analyses (such as congestion, land-use, safety, etc.) do not yet have meaningful data elements to model needs and to use for comparison to "hard" asset conditions.

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b. Percent of system or operation covered

PENNDOT: Because of limitations noted in 3a., only pavements and bridges, would have sufficient meaningful data to make good decisions, if modeling capabilities were present.

c. Interagency cooperation

PENNDOT: Our Department works closely with our many planning partners (e.g. MPOs) in developing for our capital improvement programs. Because good predictive analysis information is not available, especially for the local assets, it is more difficult to utilize a rational, needs-based distribution of spending.

- 4. Are you using Asset Management for non-highway modes and how? PENNDOT: No
- 5. What improvements would you recommend in the implementation of Asset Management?
 - a. Areas that need improvement

PENNDOT:

- Meaningful trade-off analyses for non-traditional asset factors, such as congestion, safety, etc.
- b. Future research

c. Data

PENNDOT:

 Meaningful and easy-to-collect measures and goals for non-traditional asset factors, such as congestion, safety, etc.

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